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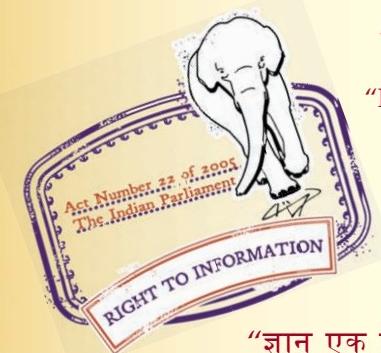
“Step Out From the Old to the New”

IS 7008-2 (1988): ISO Metric trapezoidal screw threads,
Part 2: Pitch diameter combinations [PGD 20: Engineering
Standards]

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Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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IS 7008 (Part 2) : 1988
ISO 2902 : 1977

Indian Standard

ISO METRIC TRAPEZOIDAL SCREW THREADS

PART 2 PITCH DIAMETER COMBINATIONS

(*First Revision*)

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

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Price Group 2

Indian Standard
ISO METRIC TRAPEZOIDAL SCREW THREADS
PART 2 PITCH DIAMETER COMBINATIONS
(First Revision)

NATIONAL FOREWORD

This Indian Standard (Part 2) (First Revision), which is identical with ISO 2902 : 1977 'ISO metric trapezoidal screw threads — General plan' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on 3 October 1988 on the recommendation of the Screw Threads Sectional Committee (EDC 70) and approval of the Mechanical Engineering Division Council.

This standard (Part 2) was originally issued in 1973 and was based on ISO/DIS 2902 issued by ISO. This revision has been made by adoption of ISO 2902 : 1977 to keep it in line with the ISO standard. A figure, showing lead and pitch of multiple-start thread, has been included in this revision.

IS 7008 was earlier issued in four parts, which on revision, are being aligned with the corresponding ISO standards. Other three parts in the series cover:

- Part 1 : 1988 Basic profile and maximum material profiles
- Part 3 : 1988 Basic dimensions
- Part 4 : 1988 Tolerances

In the adopted standard certain terminology and conventions are not identical with those used in Indian Standards; attention is specially drawn to the following:

- a) Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'; and
- b) Comma (,) has been used as a decimal marker while in Indian Standards the current practice is to use point (.) as the decimal marker.

CROSS REFERENCE

<i>International Standard</i>	<i>Indian Standard</i>	<i>Degree of Correspondence</i>
ISO 2901 : 1977 ISO metric trapezoidal screw threads — Basic profiles and material profiles	IS 7008 (Part 1) : 1988 ISO metric trapezoidal screw threads: Part 1 Basic profile and maximum material profiles	Identical

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a series of diameter and pitch combinations for ISO metric trapezoidal screw threads having the basic profile according to ISO 2901

2 REFERENCE

ISO 2901, *ISO metric trapezoidal screw threads -- Basic profile and maximum material profiles.*

3 CHOICE OF DIAMETER AND PITCH

Choose, for preference, diameters in column 1 of the table and, if necessary, in column 2, and then column 3.

The diameters in column 3 shall not be used for new designs.

For the diameter retained, choose one of the pitches indicated on the corresponding line, for preference the pitches within frames.

If it is necessary to use a trapezoidal thread with a pitch other than indicated in the table, choose one of the pitches assigned to a neighbouring diameter.

4 DESIGNATION

The one-start metric trapezoidal screw threads conforming to this International Standard shall be designated by the letters Tr, followed by the values of the nominal diameter and of the pitch expressed in millimetres and separated by the sign \times .

Example : Tr 40 \times 7

The multiple-start metric trapezoidal screw threads conforming to this International Standard shall be designated by the letters Tr followed by the values of the nominal diameter and of the lead for the multiple-start threads, separated by the sign \times , and, in brackets, the letter P and the value of the pitch (axial distance between two neighbouring flanks in the same direction), all expressed in millimetres (see figure).

Example : Tr 40 \times 14 (P7)

(Number of starts = $\frac{\text{Lead}}{\text{Pitch}} = \frac{14}{7}$ defines a screw thread of 40 diameter with 2 starts)

For left-hand metric trapezoidal screw threads conforming to this International Standard, the letters LH shall be added to the thread designation.

Example : Tr 40 \times 14 (P7) LH

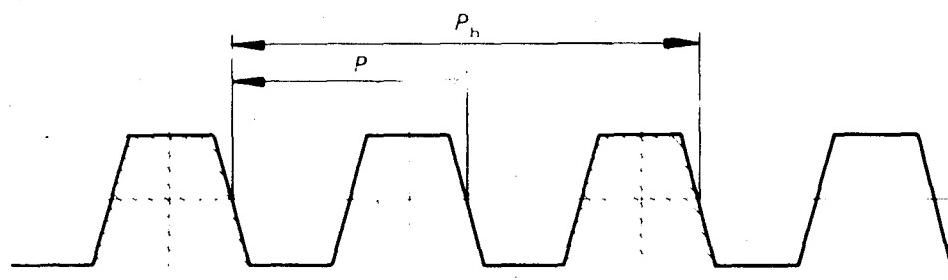


FIGURE -- Lead and pitch of multiple-start thread

P_h = lead (axial advance at one turn)

P = pitch (axial distance between two neighbouring flanks in the same direction)

5 DIAMETER/PITCH COMBINATIONS

TABLE - Diameter/pitch

Dimensions in millimetres

Nominal diameters			Pitches																					
Col. 1	Col. 2	Col. 3	44	40	36	32	28	24	22	20	18	16	14	12	10	9	8	7	6	5	4	3	2	1,5
8	9																							1,5
10																							2	1,5
12	11																						3	2
14	12																						3	2
16	18																						4	2
20																							4	2
24	22																	8		5			3	
26	24																8	8	5			3		
28	30																10	10	5			3		
32																	8		6	6		3		
36	34																10	10	6			3		
38	36																10	10	6			3		
40	42																10	10	7			3		
44																	12		7			3		
48	46																12	12	8			3		
	50																12	12	8			3		
52	55																12		8			3		
60																	14	14	9			3		
70	65																16		10			4		
	75																16	16	10			4		
80	85																18	18	10			4		
90																	18	18	12			4		
100	95																20	20	12			4		
	105																20	20	12			4		
110	110																22	22	12			4		
120		115															22	22	12			4		
	130	125															24	24	14			6		
		135															24	24	14			6		
140		145															24	24	14			6		
	150																24	24	14			6		
160		155															28	28	16			6		
		165															28	28	16			6		
170	170																28	28	16			6		
180		175															28	28	16			6		
	190	185															32	32	18			8		
		195															32	32	18			8		
200	210																36	36	20			8		
220																	36	36	20			8		
240	230																36	36	22			8		
	250																40	40	22			8		
260		260															40	40	22			8		
280		270															40	40	24			8		
300		290															44	44	24			8		

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